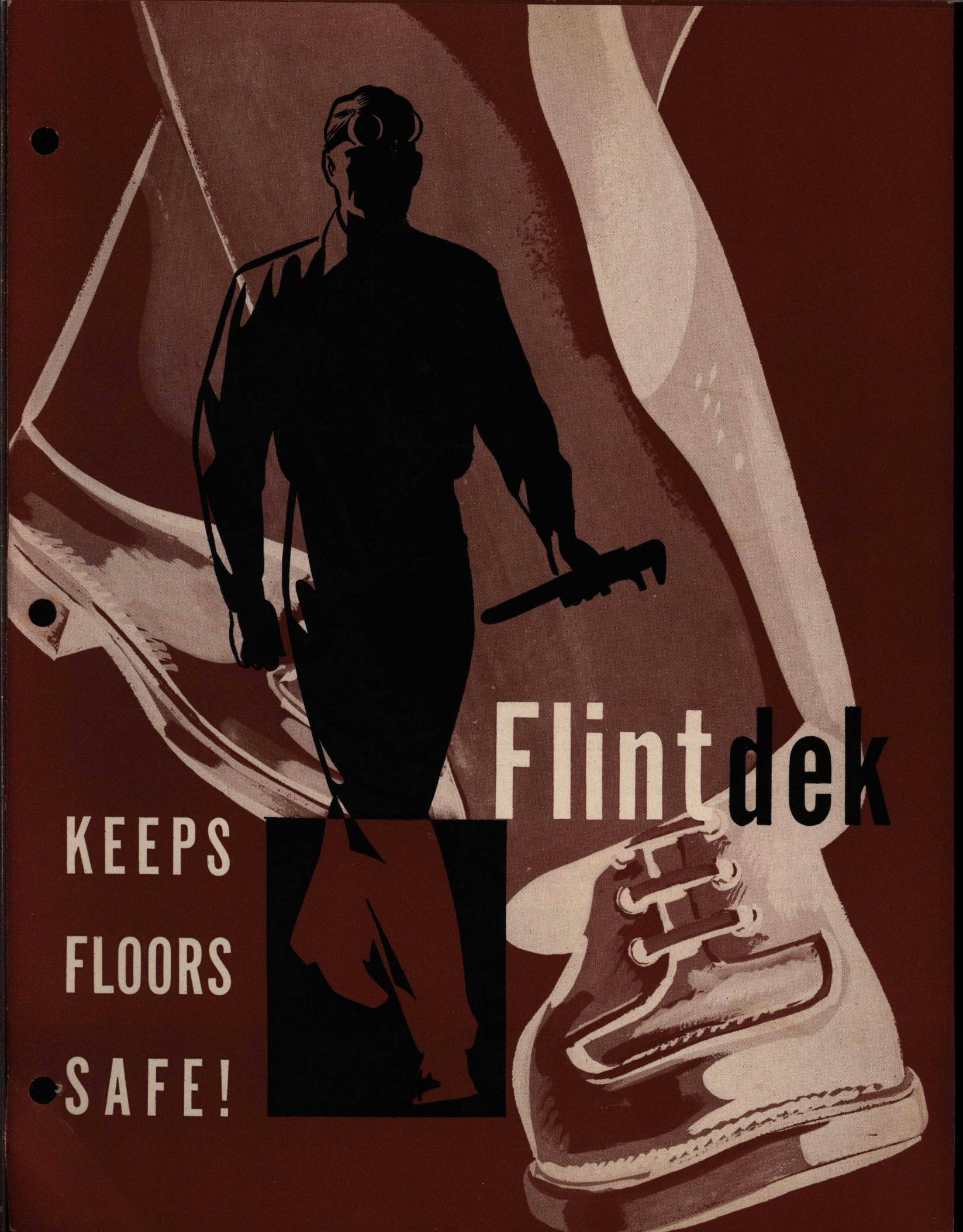

Flintdek
KEEPS
FLOORS
SAFE!

FLINTKOTE Flintdek*

NON-SLIP...WET OR DRY

Saves production time

Reduces falling accidents

Improves appearance

"KEEP FLOORS SAFE" is not an idle slogan today. Not only do falls exceed automobile deaths and injuries in the casualty records, but they cause the loss of millions of hours in production time. And yet, such accidents could be prevented by proper safety precautions. Floors that are too smooth (steps, ramps, ladder treads, machine pedals and the like) are outstanding examples of the places where a non-slip coating will reduce the hazards of slipping which are so costly to industries of all kinds.

FLINTDEK* is not a paint. It should not be confused with any thin paint-like films used on floors for either decorative or so-called non-slip purposes. It is a relatively heavy-bodied synthetic plastic coating applied by trowel or spray over metal, wood or concrete.

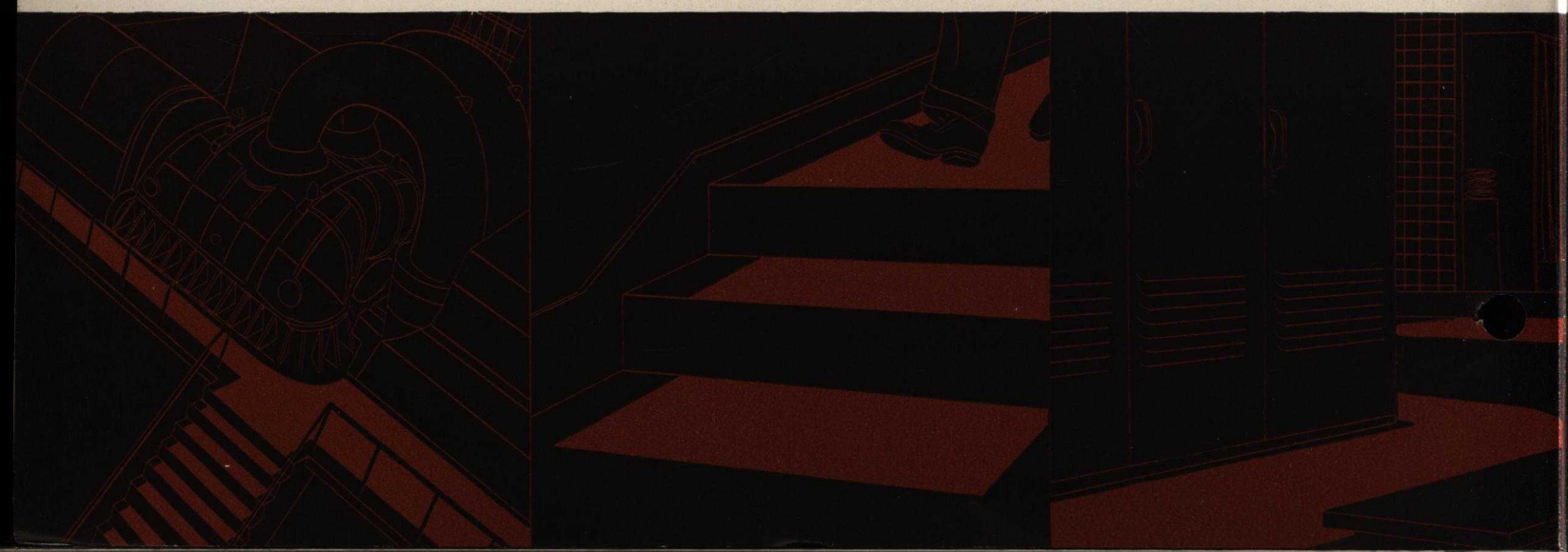
FLINTDEK is composed of a tough, cohesive, resinous plastic in which is incorporated a mineral type of wear-resistant aggregate. In its fluid state before application, **FLINTDEK** has exceptional adhesive properties to bond the coating to the surface on which it is applied. As the coating dries, within a few hours, it

*Trademark

Cat-walks, ramps and aisles around industrial plants are readily made non-slip with Flintdek as an effective safety-first measure

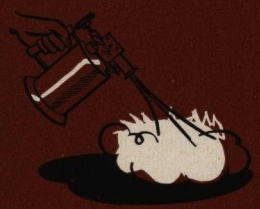
Slippery stair treads are a common source of danger both in home and factory, stores and schools. Flintdek troweled on such areas will make them safe.

In locker rooms, lavatories, around shower baths, etc., floors are often wet. The surfaces can be given sure tractive resistance with Flintdek.

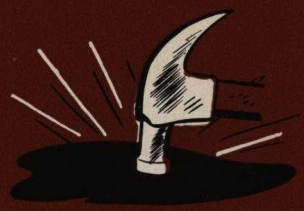


LIGHTWEIGHT—*Flintdek weighs only about 3½ ounces per square foot, applied 40 square feet to the gallon.*

EASILY APPLIED—*A measured quantity of Flintdek is placed in the area and spread evenly with a trowel in one or two coats.*



FIRE-RESISTANT—*Although inflammable in a liquid state, the dried coating of Flintdek will not support combustion.*



SHOCK-RESISTANT—*Tests made by dropping a 2-lb. steel ball from a height of 8 ft. show Flintdek's high resistance to impact.*

WATERPROOF—*A coating of Flintdek prevents moisture penetration. Over bare steel it provides protection against rust.*

GASOLINE AND OIL RESISTANT—*Flintdek is impervious to oils, gasoline, mild acids, alcohol, ordinary fats and grease. Stains wash off readily. The dry coating will not flow or sag at high temperatures.*

SAFETY-FIRST—*Mineral fillers in Flintdek assure toughness to meet wear and dependable tractive resistance wet or dry.*

loses its surface tackiness, bonds permanently, becomes tough and resistant to water, gasoline, oil, alcohol, fats and grease, and some types of acids.

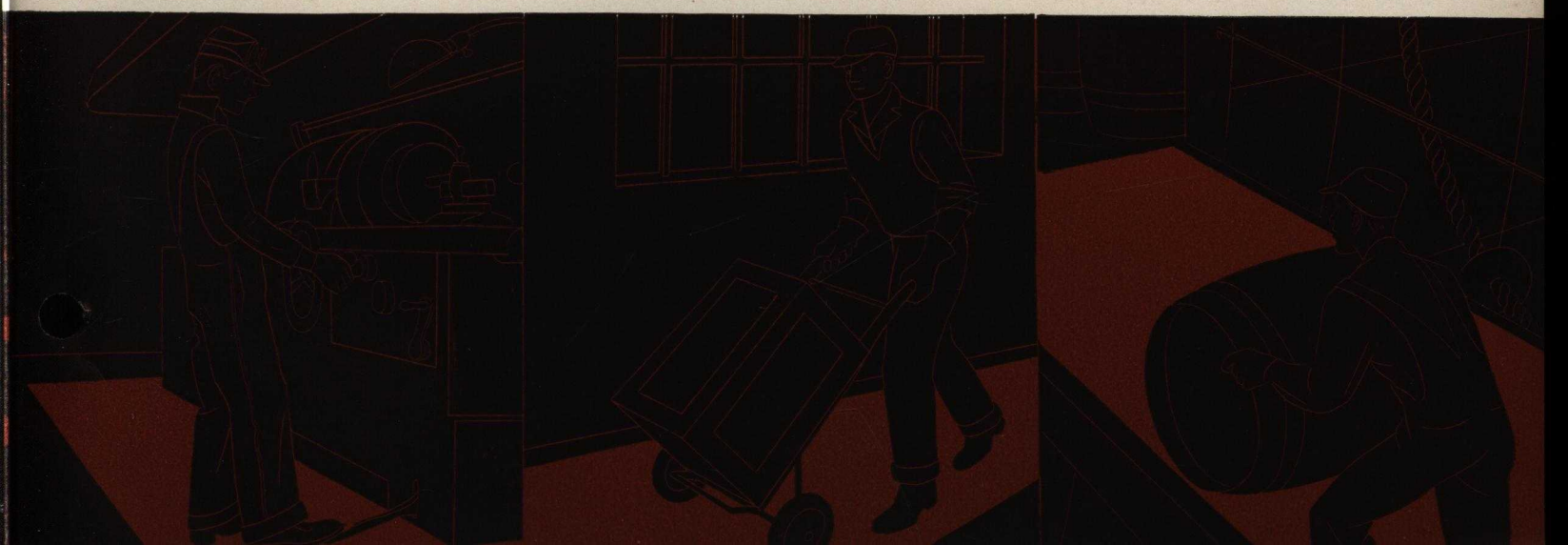
Like other Flintkote Products, **FLINTDEK** was developed through research and was subjected to innumerable tests before its acceptance. This material was perfected during the war to provide sure footing on the wet or oily steel decks of ships. Now, it is available for civilian use wherever danger from slipping is present. The phenomenal characteristics which make the application of **FLINTDEK** so effective are its resistance to weathering, wear, temperature changes, chemical detergents and corrosive agents.

FLINTDEK is available in red, green and slate color. This range gives the architect or engineer freedom to harmonize coated anti-slip areas with the prevailing color decoration and thus enhance the appearance of the surroundings. Application is comparatively simple if directions for preparation of base and specifications for coverage are followed. The Flintkote Company has prepared a data sheet giving full information. Send for your free copy.

Walking and working areas around machinery, and foot pedals on machines, should be non-slip. Coat them with Flintdek and reduce the accident hazard.

Flintdek is highly resistant to both foot and wheel wear. Aisles and walkways may be trucked over without impairing the non-slip quality of the coating.

Ramps on ships or docks and loading platforms are subjected to hard usage. Flintdek provides wear resistance as well as sure-footed safety for workers.



Bus and trolley steps wear slippery from heavy traffic. Flintdek may be applied as often as necessary to keep them safe for passengers and to maintain low accident losses.

Elevator landings, even the floors of elevators themselves, will be less hazardous if the surfaces are slip-proof. Keep these danger points safe with Flintdek, the trowel applied plastic anti-slip coating.

Other Flintkote Products for Maintenance and Construction

HYDRALT* PROTECTIVE COATINGS —Superior weather and corrosion resistant industrial asphalt emulsions will outlast any other form of bituminous coatings exposed to weather. They comprise blends of the softer, better weathering asphalts in minute particles dispersed in water with a *mineral* colloid, resulting in a *stable* emulsion. Upon being applied as a coating the water vehicle evaporates and the asphalt particles coalesce to form a coating that will not sag, flow, crack, craze or alligator when exposed to the extremes of weather, to heat or to cold. Hydralt Protective Coatings do not require heating for use... are applied cold... contain no inflammable solvents... and are nontoxic. They serve with lasting satisfaction to protect metal or masonry from the effects of weather, corrosive fumes and smoke. Hydralt Protective Coatings when completely dried out are not affected by rain, snow, ice, and will not flow at any temperature. Ask for full information before your next weatherproofing, dampproofing or waterproofing job.

FLINTKOTE FLOORING EMULSIONS —The key to cold-laid mastic—the modern practice—for heavy-duty industrial flooring and underlayments for decorative coverings. These emulsions comprise blends of asphalt carefully selected for their penetration, softening point and adhesive properties. Flintkote N-13-F Flooring Emulsion contains a prescribed quantity of fibre which serves to reinforce the binder and which is especially formulated for hand finished mastic flooring.

Specifications for the use of Flintkote Flooring Emulsions in mastic flooring are available on request. Send for your free copy.

The modern type of cold-laid mastic flooring may be laid over any firm base—wood, concrete, metal or brick. Such a floor is a malleable type which resists displacement under the heaviest traffic, yet is sufficiently resilient to absorb shock and provide a comfortable, warm walking surface. It may be laid in relatively thin or thick sections as required to meet varying conditions. Ask for full information before your next flooring or resurfacing job.

The Flintkote Company also manufactures a full line of Marine, Automotive, Railroad and Construction materials including Industrial asphalt specialties, dispersions of rubbers and resins and latex compounds. Flintkote Technical Representatives, backed by 45 years of experience and research, are available for consultation. Send your requests for information on your manufacturing, processing, construction or maintenance problems to The Flintkote Company today.

*Trademark

Flintkote-Products for Industry

THE FLINTKOTE COMPANY • INDUSTRIAL PRODUCTS DIVISION 30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

FLINTKOTE INDUSTRIAL PRODUCTS

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ST. LOUIS 1, MO.

I-F770

Printed in U. S. A.

FLINTKOTE INDUSTRIAL PRODUCTS

PRODUCT DATA SHEET

Series I-C
Number 206
ISSUE 4-47

FLINTDEK*

Lightweight, Shock Resistant, Non-Corrosive, Fire Retardant, Anti-Slip Coating for Floors—Trowel Applied—Provides Safety Underfoot—Resists Water, Gasoline, Oil, Alcohol, Fats and Greases

Safety is one of the first considerations wherever people must walk or stand. Insecure footing is not only a mental hazard but, as is generally well known, it is also a real physical one. Falls due to slippery surfaces cause untold suffering, large losses in time and money and even many thousands of fatalities each year. Many of these deaths, injuries and other losses, however, can be prevented by properly safeguarding the slippery areas which are responsible. And a highly effective method of protection is a coating of Flintdek applied to such areas.

It is not practicable to make all walking surfaces non-slip when they are built. Of course, in modern construction most of the known danger spots are protected, but changes in use, excessive wear, exposure and spillage create new hazards every day. Even areas which have been given protective treatment need renewal as time goes on and as wear takes its inevitable toll.

Steel, aluminum, galvanized iron, tile and smoothly finished wood or concrete offer dangerous footing when wet. All of these materials are widely used in a variety of ways, on a variety of walking surfaces. Danger is always present if they are too smooth or if they become coated with oil or water or grease.

Flintdek was developed only after exhaustive research and testing. The same materials provided sure footing on many ships during the war. Now, it is available for industrial and general civilian use. A few of the many places where this versatile material is reducing slippery floor hazards are:

Around machinery
On steps and ladder treads
On ramps and platforms
On steel decks and floors
In kitchens
In garages
Around swimming pools and shower baths
In food packing plants

Characteristics

Flintdek is not a paint. It is a synthetic plastic coating incorporating a mineral type filler which imparts a toughness to meet wear and a tractive resistance against slipperiness when wet. It is applied easily by spreading with an ordinary plasterer's trowel to a thickness of approximately 1/32 inch to 1/16 inch in one or two coats. The weight of Flintdek is negligible, 3½ oz. per sq. ft. It has fire resistance to a degree that it will not support combustion. It resists water, gasoline, mild acids, oil, alcohol, ordinary fats and grease.

The anti-slip properties of Flintdek are well established by tests on many installations. Moreover, the dry film is resistant to flow or sagging at temperatures up to 170 degrees F. A shock test consisting of dropping a 2 lb. steel ball from a height of eight feet does not produce chipping or cracking, thus indicating its high resistance to impact. When used over bare steel Flintdek anti-slip is also adequate protection against corrosion.

Colors

Flintdek is manufactured in slate, green and red. and cement color.

Recommended Use

Proper storage or conditioning of Flintdek before use is conducive to ease of handling and ready application. The containers should be stored under cover within the temperature range of 50 and 100 degrees F. Storage at other temperatures has no permanent harmful effect upon the material, but before application it should be kept within the specified range for a period of time sufficient to bring the temperature of the material itself within this range. A good method to assure even distribution of the filler material is to invert the containers in a place having the specified temperature for at least 48 hours before application. The abrasive particles or filler in Flintdek tend to settle when the material stands for long periods. *Always stir thoroughly before applying.*

Directions for Application

Steel Surfaces: Steel plates should be dry and free of all loose paint, dirt, slag or flux, rust, grease or oil. Poorly bonded paint, oil, or grease is removed with a hot 50% caustic soda solution and wire brushing. Newly formed areas of rust should be removed by wire brushing with an approved rust inhibitor. Deeply imbedded rust is removed by

*TRADE MARK

power or manual sanding. A final flushing with water will wash off the caustic and rust inhibitor solutions. Use a rubber squeegee and wipe with cloth to dry.

If cleaning precedes application of Flintdek to an extent where the cleaned surfaces are apt to become rusted before being coated, a zinc chromate primer paint should be applied over the steel at a coverage rate of 400 to 500 sq. ft. per gallon. If the Flintdek is applied to the newly cleaned steel before any rust is formed, no prime coat is necessary.

Prior to the application of Flintdek over zinc chromate primed steel (and the primer should be not less than 24 hours old), the surface should be examined carefully for soundness, bond and completeness of coverage. Any open spots should be touched up, allowed to dry, and any oil or grease should be washed off with soap and water, followed by flushing and drying.

Galvanized Iron Surfaces: The galvanized plates should be swept free of all loose material and any oil, grease, old paint or the like removed by scrubbing with soap and water or Oakite, followed by flushing with clear water and drying. When plates are thoroughly dry they should be given a coating of phosphate or chromate solution (manufactured for use over galvanizing under various trade names). This primer, in turn, is allowed to dry in contact with the galvanized plates before Flintdek is applied.

Wood, Concrete and Tile Surfaces: Surfaces should be dry and free of all dirt, loose paint, wax, grease or oil, to assure good bond.

Application: Flintdek is furnished by The Flintkote Company in a consistency suitable for trowel application in very thin coats. Either one or two coats may be applied provided the total coverage is about the same—approximately 40 sq. ft. per gallon. Thick coats are not recommended as the mineral fillers should not be deeply imbedded. If two-coat application is made, the coverage should be 80 sq. ft. per gallon for each coat with drying time between coats of 8 to 12 hours as determined by inspection.

Proper coverage can be accomplished by marking off the area to be coated into 40 or 80 sq. ft. spaces (such as 4 ft. x 10 ft. or 8 ft. x 10 ft.) and pouring the measured amount of Flintdek in small piles within the area. The material is spread with a regular plasterer's trowel. Effort should be made to complete the spreading with as little troweling as possible so that the maximum anti-slip value will not be impaired by excessive troweling and too smooth a finish. A light brushing in one direction will erase trowel marks if desired.

In clear weather outside applications or well ventilated interiors may be opened to foot traffic eight hours after the final coat.

For application by spraying, obtain full information by applying to Industrial Products Division, The Flintkote Company, or the local Flintkote representative.

Patching of Worn Areas: The area to be coated as a patch should be wire brushed if necessary to remove rust and be washed free of dirt, loose material, oil or grease. Flintdek is then applied by trowel to the cleaned area. Protect from traffic as you would new work.

Care of Tools: Keep tools when not being used in a pail of kerosene or other petroleum solvent. After completed application, the tools should be cleaned thoroughly with solvent immediately as the material is difficult to remove after it has dried and hardened.

Caution: Flintdek is inflammable in a liquid state. Do not apply in freezing weather or to frozen surfaces, and protect the coating on newly laid areas from open flame, low temperatures and rain. After it has hardened it will not be affected.

In applying Flintdek in enclosed areas and unventilated spaces, adequate ventilation should be provided.

Containers: 5 gallons.

FLINTKOTE PERMA-PLASTIC* FLOORING

(STANDARD TYPE)

Decorative floor surfacing made of durable plastic. Provides non-slippery, seamless topping of uniform color for clean, attractive appearance and with high resistance to wear. Applied over wood, concrete, magnesite or other hard flooring in successive thin coats by special application technique. Resistant to weather, grease, oil and gasoline. Quickly installed at reasonable cost and economically maintained.

Development

The application of synthetic plastics in liquid form as coatings or finishes for various materials has increased greatly in recent years. Many new plastics were developed during the war to fill special needs and to serve under extraordinary conditions, and some of these also provided colorful beauty as well.

Continued refinement and testing has also resulted in expanded usage and subsequent lower costs. Today, as a consequence, certain plastics are no longer in the rare, high-priced field and so have become available at reasonable prices to a wide range of industrial and commercial consumers.

Development of Flintkote *Perma-Plastic* Flooring followed this pattern. Only a few years ago, such

Entrance foyer to the Boston Arena. Flintkote Perma-Plastic Flooring was installed to provide a colorful, seamless surface over worn, badly cracked concrete. This floor is subjected to heavy foot traffic.

*Trade Mark

a product would not be made widely available due to high cost of production. Now, however, this superior plastic floor surfacing is within the reach of all at a price fully competitive with other types of flooring.

Flintkote *Perma-Plastic* Flooring is not the same as other flooring materials, and it fills requirements which are not met by other materials. It provides a lightweight, relatively thin yet extremely serviceable, wearing surface without joints or seams. It is made in a variety of colors, and it has the important advantage of being resistant to a variety of products that have damaged floors in the past.

Characteristics

Flintkote *Perma-Plastic* Flooring should never be confused with paint. Its ultimate thickness is many times that of an equal number of paint coats. It is usually laid to a depth of approximately 1/16 inch. In effect, it is a built-up surface of several coats of plastic applied successively. Because of its composition and rate of drying, it is not practicable to place Flintkote *Perma-Plastic* Flooring in a single heavy coat. This factor of several successive coats is almost negligible in affecting costs as its unique formulation requires a minimum of troweling or brushing.

Flintkote *Perma-Plastic* Flooring comprises selected synthetic plastics with accurately graded mineral fillers, properly formulated plasticizers, color pigments and solvents. It is processed to provide a thick liquid composition which is economical and easy to handle. The fillers impart a toughness to resist wear and provide a non-slippery surface under foot. Almost any desired smoothness may be obtained by the number of finish coats applied.

This type of plastic flooring is not easily marred or dented, having a hard resilience. It will not burn readily and the fumes given off when subjected to direct flame are not toxic. (This is an important requirement under many present day fire ordinances.)

Flintkote *Perma-Plastic* Flooring is resistant to the normal use of floor cleaning compounds, water, oil, grease and a variety of solvents. The latter three have a disastrous effect upon many types of floors, but are non-injurious to this type.

(For unusual conditions involving acid conditions, excessive wetting and concentrations of grease, see Flintkote Product Data Sheet Series I-C No. 221 Flintkote *Perma-Plastic* Flooring—Chemically Resistant Type.)

Recommended Use

Flintkote *Perma-Plastic* Flooring—Standard Type—is particularly suited for application over concrete, magnesite or other firm base where a seamless, non-slippery, colorful decorative finish is desired. It may also be used over conventional wood floors but it should be noted that such floors are not rigid and continue to expand and contract; consequently, the joints between boards may show as hair-line cracking through the plastic finish.

The advantages of a seamless sheet type wearing surface are many. Dirt, moisture or germs do not collect as they do in a floor with joints. Thus cleaning is simplified and appearance greatly enhanced.

Rough or dusting concrete surfaces are easily corrected by the application of Flintkote *Perma-Plastic* Flooring. Uneven spots, cracks or small holes are leveled as described under Directions for Application.

Flintkote *Perma-Plastic* Flooring may be installed both in and out of doors. It will provide remarkably efficient service under foot traffic, light trucking and severe weather exposure. It does not change with age, become hard and brittle under heat or cold or lose its color properties under sunlight.

On floors such as steel or other metal, asphaltic mastic, oil treated wood block or glazed tile, all presenting a difficult bonding problem, extreme care should be exercised in the use of plastic flooring. It is recommended that a Flintkote Company Industrial Products Division representative be consulted to determine the proper procedure for such an application.

Colors

Flintkote *Perma-Plastic* Flooring—Standard Type—is produced regularly in black, red, brown and green. Other colors may be obtained for special installations on special order, subject to acceptance by The Flintkote Company.

Wear resistant, colorful and non-slippery, Flintkote Perma-Plastic Flooring is easily applied to steps.

Directions for Application

The products required to install a standard Flintkote *Perma-Plastic* floor are as follows:

Flintkote *Perma-Plastic* Floor Primer #11.
Flintkote *Perma-Plastic* Base Flooring Type S.
Flintkote *Perma-Plastic* Finish Flooring Type S.

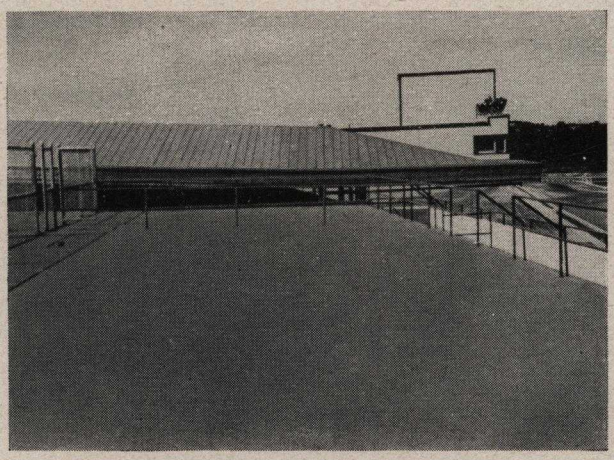
PREPARATION OF SURFACE: The floor over which Flintkote *Perma-Plastic* Flooring is to be laid must be clean and dry. All loose paint, mortar, tar spots, dirt, grease, oil, wax or other foreign matter should be removed by appropriate cleaning methods. If caustic cleaners are used, be sure to flush with clear water afterwards and allow to dry. If a concrete floor base is ultra-glassy smooth, an acid wash treatment may be required to assure the best bonding. All surfaces should be dust free.

PATCHING AND LEVELING: The line and grade of new floor bases should require no leveling. On older floors, minor surface imperfections, chipped or spalled sections, cupping caused by wear, cracks, joints etc., may be repaired in the following manner: Prime the areas to be leveled or patched with Flintkote *Perma-Plastic* Floor Primer #11 and allow to dry. Then trowel onto such areas a mastic composed of 1 volume of fine sand mixed with 1 volume of Flintkote *Perma-Plastic* Base Flooring Type S.

PRIMING: Over the clean, dry, level underfloor, apply with brush or spray a coat of Flintkote *Perma-Plastic* Floor Primer #11 in sufficient quantity to fill the pores in the surface. Coverage will depend on the porosity of the underfloor, but should average about 200 sq. ft. per gallon. Allow the primer to dry.

MIXING BASE COAT: Flintkote *Perma-Plastic* Base Flooring Type S contains a prescribed quantity of selected aggregate which settles somewhat in the container and must be mixed thoroughly before using. This mixing is facilitated by having a separate container into which is poured as much of the liquid as possible; after which the remaining material is scraped out and paddle mixed with the first portion. Inverting the containers occasionally while in storage will tend to keep settling to a minimum.

APPLICATION OF BASE COATS: Flintkote *Perma-Plastic* Base Flooring Type S is applied with trowel. (If desirable to apply by spray, consult a Flintkote Industrial Products Division representative for special instructions.) The material is spread with a regular trowel having a rectangular face held at an angle of about 45° and used with a scraping motion. It is suggested that the material be dipped or ladled from the container, and poured on the floor just ahead of the troweling. Slight pressure is exerted and full strokes are used to carry the material ahead of the trowel. In this way the thickness of the coating applied is governed by the size of the aggregate particles in the base material.



This view shows Flintkote Perma-Plastic Flooring on the observation deck of a large racing plant grandstand.

Any excessive troweling must be avoided. Only as many strokes as required to scrape the base material on for complete and uniform coverage should be used. One coat should require approximately 1 gallon per 100 sq. ft. of surface.

Drying time must be allowed between coats. Under normal conditions of temperature and humidity (about 70 degrees) base coats will dry in about 1 hour, but if the coating slips when tested under pressure of the fingers, a longer drying time should be allowed.

One to three or more base coats are applied in the manner described, depending upon the roughness of the sub-floor and the requirements of the traffic to be imposed.

APPLICATION OF FINISH COATS: Flintkote *Perma-Plastic* Finish Flooring Type S shall be applied over the dry base coat in one or more coats, either by trowel or brush. (If spray application is desired, consult a Flintkote Industrial Products Division representative for special instructions.)

The finish coats are likewise applied in thin coats with drying time allowed between each coat. The rate of coverage per coat is approximately 200 sq. ft. per gallon.

Flintkote *Perma-Plastic* Finish Flooring Type S contains no aggregate. In general, the more coats applied, the smoother the finish. It flows and spreads readily, but must not be troweled or brushed out excessively. Continued working of the surface will tend to tear the surface because it dries very rapidly.

The finish coats transform the surface from a fine sandpaper-like finish of the base coat to a satin-like one that is easily cleaned and maintained. Nor do applications of finish coats entirely destroy the non-slip characteristics, even though the surface is smoother.

Under ordinary conditions, Flintkote *Perma-Plastic* Flooring products—primer, base, and finish—will not require thinning; however, if necessary, only Flintkote *Perma-Plastic* Thinner #61 shall be used.

At least two applications of finish coat are recommended to seal the surface properly. Additional coatings of both base and finish coats may be applied when it is desirable to build thickness and provide greater wearability.

Use of wax will further enhance the appearance however, it must be expected that waxing will reduce the non-slip characteristics of the *Perma-Plastic* Flooring surface. Any of the conventional floor waxes including paste may be used.

CARE OF TOOLS: Use Flintkote *Perma-Plastic* Thinner #61 for cleaning brushes, trowels and other tools.

CAUTION: Due to the rapid drying characteristics of Flintkote *Perma-Plastic* Flooring, keep containers covered tightly when not using. Do not apply in direct sunlight during hot weather, but shade the working area to retard drying of the surface skin. Adequate ventilation should be provided for installations in enclosed rooms or basements. The use of fans or blowers will also facilitate drying of the flooring under poor conditions.

These products contain inflammable solvents, and workmen should be cautioned against use near open flame.

CONTAINERS:

Flintkote *Perma-Plastic* Floor Primer #11—50 gallon drums, 5 gallon pails, 1 gallon jars.

Flintkote *Perma-Plastic* Base Flooring—Type S—5 gallon pails only.

Flintkote *Perma-Plastic* Finish Flooring—Type S—50 gallon drums, 5 gallon pails, 1 gallon jars.

Flintkote *Perma-Plastic* Thinner #61—50 gallon drums, 5 gallon cans, 1 gallon jars.

FLINTKOTE INDUSTRIAL PRODUCTS

PRODUCT DATA SHEET

Series I-C
NUMBER 221
Issue A-47

FLINTKOTE PERMA-PLASTIC* FLOORING

(CHEMICALLY RESISTANT TYPE)

Durable synthetic resin plastic flooring especially formulated to resist excessive wetting, grease, oil, gasoline and numerous acid solutions. Provides a non-slippery, seamless topping of uniform color and clean, attractive appearance with high resistance to wear. For application over concrete, magnesite or other hard floors in successive thin, quick-drying coats, using trowel, brush or spray.

Characteristics

Flintkote *Perma-Plastic* Flooring—Chemically Resistant Type—is similar to the Standard Type of *Perma-Plastic* Flooring in appearance and application, but differs in its composition. Selected synthetic resins, chosen for their high resistance to exposure and to a variety of acid solutions, provide the basis for a new type flooring material which has unique properties of chemical resistance. The damaging effects of various chemicals, grease, oil, solvents, fumes and weather upon many of the usual floor surfacing materials is well known. Flintkote *Perma-Plastic* Flooring of the Chemically Resistant Type, on the other hand, is designed for meeting unusual conditions and is therefore considered to be superior for those applications involving the factors described.

Flintkote *Perma-Plastic* Flooring—should not be confused with paint. A normal application is many times the thickness of a paint film, even several coats. In effect, it is a built-up surface of several applications. Because of its composition and rate of drying, it is not practicable to apply *Perma-Plastic* Flooring in a single heavy coat. Therefore, it is placed in successive thin coats.

The material comprises the plastic in liquid form to which fillers, plasticizers and color are added to provide the base flooring and finish flooring in ready-to-use compositions. These are adapted for the easy application technique later described.

Flintkote *Perma-Plastic* Flooring—Chemically Resistant Type—is not easily marred or dented, having a hard resilience. It will not burn readily and the fumes given off when subjected to direct flame are not toxic. (This is an important requirement under many present day fire ordinances.)

*Trade Mark

NOTE: If the unusual conditions described above are not encountered, Flintkote *Perma-Plastic* Flooring—Standard Type—should be recommended as it is somewhat more economical for ordinary service and is available in a variety of decorative colors. (See Flintkote Product Data Sheet Series I-C No. 220—Flintkote *Perma-Plastic*—Standard Type.)

Recommended Use

Flintkote *Perma-Plastic*—Chemically Resistant Type—may be applied over concrete, magnesite or other firm base. It may be used also over conventional wood flooring, but it should be noted that such floors are not rigid and continue to expand and contract; consequently, the joints between boards may show through as hair-line cracks in the plastic.

Rough or broken surfaces, or jointed floors, are easily corrected by the application of *Perma-Plastic* Flooring to provide a smooth, seamless flooring. Cleaning is simplified and the appearance is greatly enhanced.

Flintkote *Perma-Plastic* Flooring—Chemically Resistant Type—may be installed either indoors or outdoors. It will provide remarkably efficient service under foot traffic, light trucking and weather exposure. It does not change with age, become soft in hot weather or brittle in cold weather.

On such floors as steel or other metals, asphaltic mastic, treated wood block or glazed tile, all presenting a difficult bonding problem, extreme care should be exercised in using plastic flooring. It is recommended that a Flintkote Company Industrial Products Division representative be consulted to determine the proper application procedure or feasibility of the project.

Resistance Offered to Many Types of Chemicals

Since most attacks on floors by chemicals are complicated by the spillage of more than one material, it is desirable to assess conditions accurately or conduct laboratory tests upon experimental areas of this plastic flooring. As an indication of the resistance offered by Flintkote *Perma-Plastic* Flooring—Chemically Resistant Type, the following tests were made for which no warranty is either expressed or implied:

IMMERSED IN	TIME OF IMMERSION	OBSERVATIONS
5% sulfuric acid	6 days	No effect
5% hydrochloric acid	" "	" "
5% phosphoric acid	" "	" "
5% chromic acid	" "	" "
5% nitric acid	" "	" "
5% citric acid	" "	" "
5% lactic acid	" "	" "
5% acetic acid	" "	" "
5% tannic acid	" "	" "
5% sodium hydroxide	" "	" "
5% sodium chloride	" "	" "
sour milk	" "	" "
vinegar	" "	" "
maple & corn syrup	" "	" "
*mayonnaise	" "	" "
*bacon grease	" "	" "
*butter	" "	" "
beer	" "	" "
wine (20% alcohol)	" "	" "
whiskey (92 proof)	" "	softened floor—no disintegration or discoloration
#10 lubricating oil		No effect
Hi-test gasoline		" "

*Followed by baking at 200°F. for 1 hour.

Colors

Flintkote *Perma-Plastic* Flooring—Chemically Resistant Type—is produced regularly in black and dark green. Consult The Flintkote Company regarding the possibility of other colors if deemed necessary.

Directions for Application

The products required to install Flintkote *Perma-Plastic* Flooring—Chemically Resistant Type—are as follows:

Flintkote *Perma-Plastic* Floor Primer #11.
Flintkote *Perma-Plastic* Base Flooring Type C.
Flintkote *Perma-Plastic* Finish Flooring Type C.

PREPARATION OF SURFACE: The floor over which Flintkote *Perma-Plastic* Flooring is to be laid must be clean and dry. All loose paint, mortar, tar spots, dirt, grease, oil, wax or other foreign matter should be removed by appropriate cleaning methods. If caustic cleaners are used, be sure to flush with clear water afterwards and allow to dry. If a concrete floor base is ultra-glassy smooth, an acid wash treatment may be required to assure the best bonding. All surfaces should be dust free.

PATCHING AND LEVELING: The line and grade of new floor bases should require no leveling. On older floors, minor surface imperfections, chipped or spalled sections, cupping caused by wear, cracks, joints etc., may be repaired in the following manner: Prime the areas to be leveled or patched with Flintkote *Perma-Plastic* Floor Primer #11 and allow to dry. Then trowel onto such areas a mastic composed of 1 volume of fine sand mixed with 1 volume of Flintkote *Perma-Plastic* Base Flooring Type C.

PRIMING: Over the clean, dry, level underfloor, apply with brush or spray a coat of Flintkote *Perma-Plastic* Floor Primer #11 in sufficient quantity to fill the pores in the surface. Coverage will depend on the porosity of the underfloor, but should average about 200 sq. ft. per gallon. Allow the primer to dry.

MIXING BASE COAT: Flintkote *Perma-Plastic* Base Flooring Type C contains a prescribed quantity of selected aggregate which settles somewhat in the container and must be mixed thoroughly before using. This mixing is facilitated by having a separate container into which is poured as much of the liquid as possible, after which the remaining material is scraped out and paddle mixed with the first portion. Inverting the containers occasionally while in storage will tend to keep settling to a minimum.

APPLICATION OF BASE COATS: Flintkote *Perma-Plastic* Base Flooring Type C is applied with trowel. (If desirable to apply by spray, consult a Flintkote Industrial Products Division representative for special instructions). The material is spread with a regular trowel having a rectangular face held at an angle of about 45° and used with a scraping motion. It is suggested that the material be dipped or ladled from the container, and poured on the floor just ahead of the troweling. Slight pressure is exerted and full strokes are used to carry the material ahead of the trowel. In this way the thickness of the coating applied is governed by the size of the aggregate particles in the base material.

Any excessive troweling must be avoided. Only as many strokes as required to scrape the base material on for complete and uniform coverage should be used. One coat should require approximately 1 gallon per 100 sq. ft. of surface.

Drying time must be allowed between coats. Under normal conditions of temperature and humidity (about 70 degrees) base coats will dry in about 1 hour, but if the coating slips when tested under pressure of the fingers, a longer drying time should be allowed.

One to three or more base coats are applied in the manner described, depending upon the roughness of the sub-floor and the requirements of the traffic to be imposed.

APPLICATION OF FINISH COATS: Flintkote *Perma-Plastic* Finish Flooring Type C shall be applied over the dry base coat in one or more coats, either by trowel or brush. (If spray application is desired, consult a Flintkote Industrial Products Division representative for special instructions).

The finish coats are likewise applied in thin coats with drying time allowed between each coat. The rate of coverage per coat is approximately 200 sq. ft. per gallon.

Flintkote *Perma-Plastic* Finish Flooring Type C contains no aggregate. In general, the more coats applied, the smoother the finish. It flows and spreads readily, but must not be troweled or brushed out excessively. Continued working of the surface will tend to tear the surface because it dries very rapidly.

The finish coats transform the surface from a fine sandpaper-like finish of the base coat to a satin-like one that is easily cleaned and maintained. Nor do applications of finish coats entirely destroy the non-slip characteristics, even though the surface is smoother.

At least two applications of finish coat are recommended to seal the surface properly. Additional coatings of both base and finish coats may be applied when it is desirable to build thickness and provide greater wearability.

Use of wax will further enhance the appearance however, it must be expected that waxing will reduce the non-slip characteristics of the *Perma-Plastic* Flooring surface. Any of the conventional floor waxes including paste may be used.

Under ordinary conditions, Flintkote *Perma-Plastic* Flooring products—primer, base, and finish—will not require thinning; however, if necessary, only Flintkote *Perma-Plastic* Thinner #61 shall be used.

CARE OF TOOLS: Use Flintkote *Perma-Plastic* Thinner #61 for cleaning brushes, trowels and other tools.

CAUTION: Due to the rapid drying characteristics of Flintkote *Perma-Plastic* Flooring, keep containers covered tightly when not using. Do not apply in direct sunlight during hot weather, but shade the working area to retard drying of the surface skin. Adequate ventilation should be provided for installations in enclosed rooms or basements. The use of fans or blowers will also facilitate drying of the flooring under poor conditions.

These products contain inflammable solvents, and workmen should be cautioned against use near open flame.

CONTAINERS:

Flintkote *Perma-Plastic* Floor Primer #11—50 gallon drums, 5 gallon pails, 1 gallon jars.

Flintkote *Perma-Plastic* Base Flooring—Type C—5 gallon pails only.

Flintkote *Perma-Plastic* Finish Flooring—Type C—50 gallon drums, 5 gallon pails, 1 gallon jars.

Flintkote *Perma-Plastic* Thinner #61—50 gallon drums, 5 gallon cans, 1 gallon jars.